Visualizing and Predicting Heart Diseases with an Interactive Dashboard

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Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dashboard

Serum Cholesterol Levels Vs Age

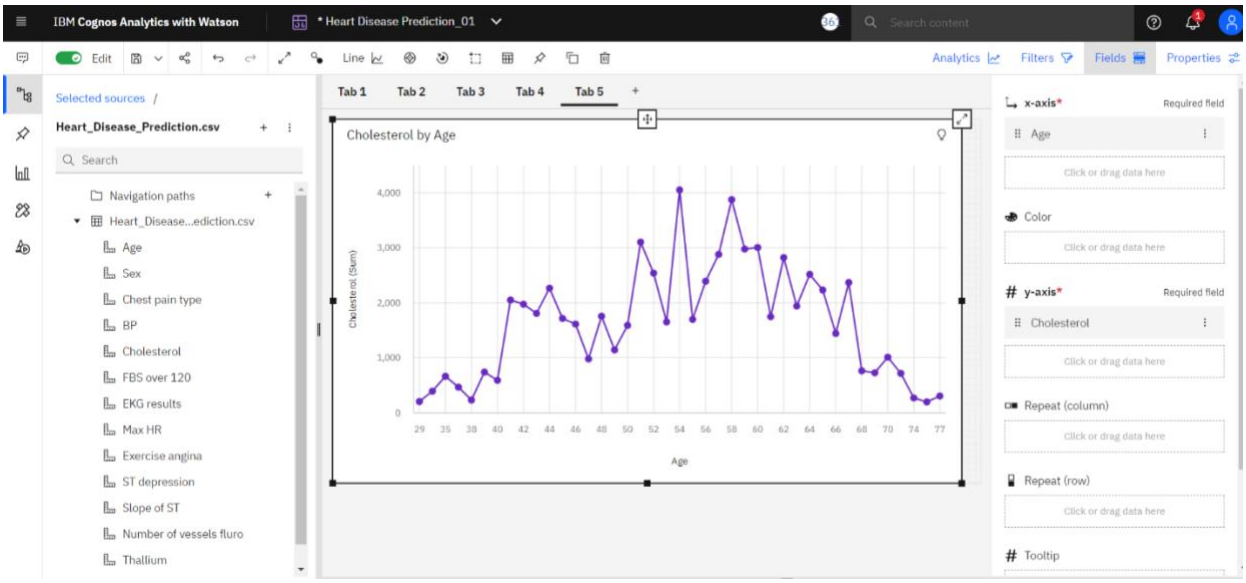
In Kasakake Village, the serum cholesterol levels of healthy participants were evaluated. Between the third and fifth decade for males and the third to seventh decade for females, the blood cholesterol levels considerably rose with age. After then, male levels were maintained while female levels fell. Male mean peak levels (+/- SD) were 178 +/- 31 mg/100 ml and female mean peak values (+/- SD) were 207 +/- 37 mg/100 ml. In men and girls, respectively, the presumptive values of the 0 year old obtained from the regression lines generated from the plot of blood cholesterol levels against age were 129 mg/100 ml and 112 mg/100 ml.

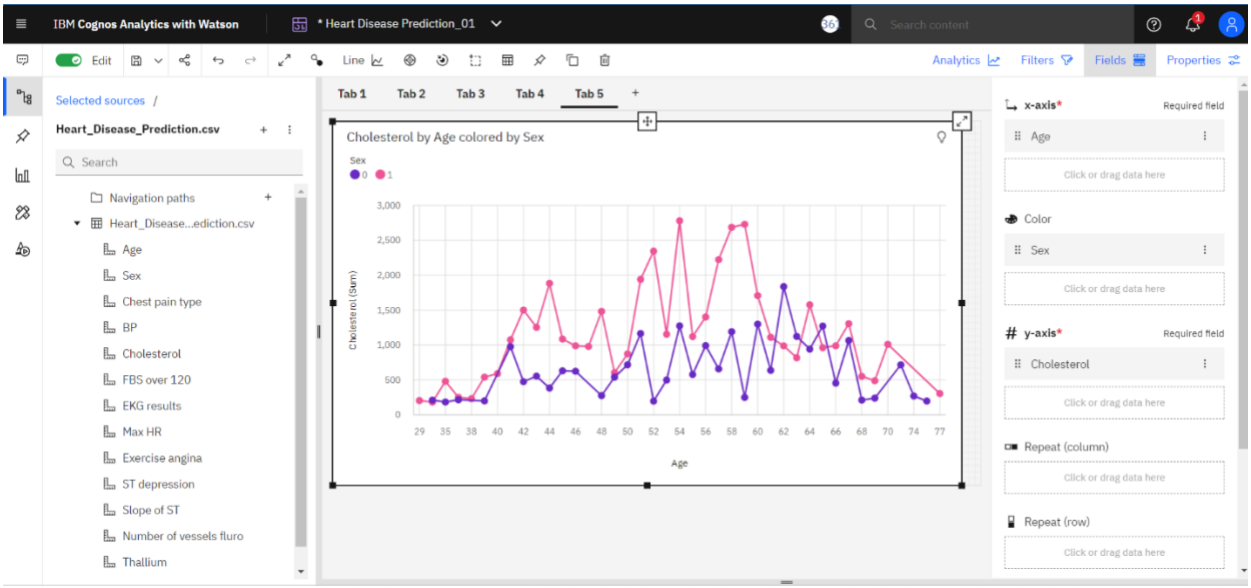
The relative body weight calculated using the modified Broca's approach was well related with the blood cholesterol level across the whole age range of females. Males showed a similar but less rendered association. In contrast

to the trend of the blood cholesterol level, there was no equivalent change in the relative body weight in either sex. The mean cholesterol level in the umbilical cord blood serum was 65 +/- 13 mg/100 ml in the normally delivered full-term babies, and it increased to 150 +/- 46 mg/100 ml during the first one to three months after birth, which was very similar to the presumptive values derived from the regression lines in the adults.

The total cholesterol levels increase with age during young adulthood and middle age and decline with age later in life. This is attributed to changes in diet, body composition, medication use, physical activity, and hormone levels. Additionally, there was a strong association between the body weight and cholesterol level. It is determined that age and relative body weight are significant and independent factors of blood cholesterol level in healthy adults starting at birth.

DATA VISUALISATION USING LINE CHART





Cholesterol in Male and Female

There are gender and sex spectrums. The sex that is determined at birth will be referred to in this article as "men," "women," or both. The entire quantity of cholesterol in your blood is known as your total cholesterol level. It includes high-density lipoproteins (HDLs) and low-density lipoproteins (LDLs) (HDLs) triglycerides Because it obstructs your blood arteries and raises your risk for heart disease, LDL is also known as bad cholesterol. HDL is regarded as good cholesterol since it aids in heart disease prevention. The better, the higher your HDL. The higher the non-HDL cholesterol, the higher the risk of heart disease.

Triglyceride levels are included in total cholesterol. These are regarded as the building blocks of cholesterol and are a different sort of fat that can accumulate in the body. Your risk of heart disease increases when your

triglyceride levels are high and your HDL levels are low. Beginning at age 20, when cholesterol levels can start to climb, the American Heart Association Trusted Source advises that all individuals get their cholesterol examined every four to six years. Cholesterol levels tend to rise as we get older. Generally speaking, males are more likely than women to have greater cholesterol. But after a woman hits menopause, her risk increases. More regular testing is advised for people with high cholesterol and other cardiac risk factors including diabetes.